GOVERNMENT OF INDIA
SPACE
LOK SABHA

UNSTARRED QUESTION NO:623
ANSWERED ON:26.11.2014
ACHIEVEMENTS IN SPACE SCIENCE
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Will the Minister of SPACE be pleased to state:

(a) the details of achievements made in the field of space during the last one year;

(b) the way in which these achievements, if any, will benefit the country; and

(c) the details of the future space programmes to be undertaken by the Government?

Answer

MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PG & PENSIONS AND IN THE PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH):

(a) The details of the major achievements made in the field of space during the last one year (since November 2013) are given below:

(i) Successful launch of India`s first interplanetary spacecraft, Mars Orbiter onboard Polar Satellite Launch Vehicle PSLV-C25 on November 05, 2013 from Satish Dhawan Space Centre, Sriharikota. On September 24, 2014, India`s Mars Orbiter Spacecraft was successfully placed into an elliptical orbit around planet Mars.

(ii) Successful launch of the Geosynchronous Satellite Launch Vehicle (GSLV-D5) with an indigenous cryogenic engine & stage on 5th January 2014 from Satish Dhawan Space Centre, Sriharikota. The GSLV-D5 injected the GSAT-14 Communications Satellite, weighing 1982 kg, into a precise Geosynchronous Transfer Orbit.

(iii) Successful launch of Indian navigational satellite IRNSS-1B, the second satellite in the Indian Regional Navigation Satellite System (IRNSS) onboard PSLV-C24 on April 04, 2014 and IRNSS-1C, the third satellite of IRNSS onboard PSLV-C26 on October 16, 2014 from Satish Dhawan Space Centre, Sriharikota.

(iv) PSLV-C23 successfully launched French Earth Observation Satellite SPOT-7 along with four small satellites viz. AISAT (Germany), NLS 7.1 & 7.2 (Canada) and VELOX-1 (Singapore) on June 30, 2014 under commercial arrangements between ANTRIX and the respective foreign agencies.

(b) The way in which the above achievements benefits the country are given below:

(i) Mars Orbiter Mission has benefitted the country by (1) technological up-gradation of the country in the area of space technology (2) providing excellent opportunities in planetary research for the scientific community of the country and enthuse the younger generation.

(ii) GSLV-D5 flight has benefitted the country by achieving self-reliance in launching 2000 kg class communication satellites into Geosynchronous Transfer Orbit. GSAT-14 satellite has benefitted the country by augmenting the satellite communication infrastructure in the country with addition of 12 transponders.

(iii) IRNSS is a constellation of seven satellites and currently three satellites (IRNSS-1A, 1B & 1C) are in orbit. With the planned completion of constellation, IRNSS will benefit the country by providing positioning services with an absolute position accuracy of better than 20 meters over Indian Land Mass and a region extending to about 1500 Kms around India.

(iv) The successful launch of French satellite SPOT-7 along with four other foreign satellites has benefitted the country by enhancing the reliability and commercial prospects of India`s PSLV in the global market.

(c) The future space programme to be undertaken by ISRO envisages development of advanced launch vehicle systems including next generation GSLV MkIII, earth observational satellites with improved resolution (Resourcesat-2A, Cartosat-2E, Cartosat-3), advanced communication satellite (GSAT-11, GSAT-15, 16, 17, 18 & 19, GSAT-6), completion of IRNSS constellation (IRNSS-1D,1E,1F & 1G), development of critical technologies for space transportation system and satellites for space science and planetary exploration purposes, including Astrosat, Chandrayaan-2 & Aditya-1